



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/684,961

10/14/2003

Stephen Virgilio

13898

9940

7590

04/20/2007

Paul F. Donovan
Illinois Tool Works Inc.
3600 West Lake Avenue
Glenview, IL 60025

EXAMINER

STINSON, FRANKIE L

ART UNIT

PAPER NUMBER

1746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

04/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/684,961

Applicant(s)

VIRILIO ET AL

Examiner

FRANKIE L. STINSON

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on December 22, 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 7-11 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 14-16 is/are allowed.
- 6) ☒ Claim(s) 1-5, 12, 17, 18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) 6 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1746

1. Claims 7-11, 16 and 19 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on September 18, 2006.

2. The indicated allowability of claim 5 and 12 is withdrawn in view of the newly discovered reference(s) to Japan '469. Rejections based on the newly cited reference(s) follow.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 5, 12, 17, , 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '469 (Japan 5-221469) in view of either Bellati et al. (U. S. Pat. No. 5,058,946) or Japan '654 (Japan '140654).

Re claims 1 and 17, Japan '469 is cited disclosing a dispenser assembly for dispensing additive material, said dispensing assembly comprising:

a reservoir (4) for holding the additive;

a dispenser actuator configured to selectively open an outlet (5) of said reservoir upon movement of said actuator; and

a shape memory wire (1) adapted contract in length upon application of an electric current (as at 2) and to elongate upon interruption of current thereto, said shape

Art Unit: 1746

memory wire being connected to said actuator for causing movement of said actuator by contraction of said wire that differs from the claims only in the recitation of the dispenser dispensing an additive during a wash cycle. Bellati and Japan'654 are each cited disclosing the arrangement of employing a memory shape actuator for dispensing an additive during a wash cycle. It therefore would have been obvious to one having ordinary skill in the art to modify the arrangement of Japan'469, to have the same employed in a dishwasher as taught by either Bellati or Japan'654, since Bellati and Japan'654 clearly discloses that it is old and well known to employ such in a dishwasher and the same is considered to a substitution of equivalents. Re claims 2, 4 and 21, Japan'654 discloses the shape memory wire and with the reservoir acting as a plunger. Re claims 5 and 12, to provide a second actuator and reservoir, is deemed to an obvious duplication of parts (MPEP 2144.04 REVERSAL, DUPLICATION OR RE-ARRANGEMENT OF PARTS). As claimed, there is no structural nor functional difference of the second actuator and reservoir. It is suggested to specifically claimed both the detergent additive and the rinse additive reservoirs. Re claim 18, Japoan'469 discloses the pulling.

5. Claims 3 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applied prior art as applied to claims 1 and 17 above above, and further in view of Japan'217 (Japan 10-55217).

Claims 3 and 20 define over the applied prior art only in the recitation of the lever, Japan'217 is cited disclosing the arrangement of employing a lever in a shape memory alloy actuator employing a lever. It therefore would have been obvious to one having

Art Unit: 1746

ordinary skill in the art to modify the arrangement of Japan'469, to include a lever as taught by Japan'217, since the it is old and well know to employ levers, cranks or rods in various actuators depending upon the environment and of space requirements.

6. Claims 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 14-16 stand allowed.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Japan'468, Japan'582, Mernroe, Germany'579, Japn'498, Japan'435, note the actuator..

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00 pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 1746

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fls

A handwritten signature in black ink, appearing to read 'F. L. Stinson', with a long horizontal flourish extending to the right.

FRANKIE L. STINSON
Primary Examiner
GROUP ART UNIT 1746